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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,206	03/04/2002	David F. Bantz	YOR920010529US1	6322
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HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			CERVETTI, DAVID GARCIA	
			ART UNIT	PAPER NUMBER
			2136	

DATE MAILED: 01/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/091,206	Applicant(s) BANTZ ET AL.	
	Examiner David G. Cervetti	Art Unit 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments filed October 6, 2005, have been fully considered but they are not persuasive.
2. Claims 1-17 are pending and have been examined.

Response to Amendment

3. Claims 1, 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson et al. (US Patent Number: 5,267,312, hereinafter Thompson), and further in view of Hsu et al. (US Patent Number: 6,041,410, hereinafter Hsu).
4. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson and Hsu as applied to claim 1 above, and further in view of Neoh (US Patent Number: 6,668,204).
5. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neoh and Dabbish et al. (US Patent Number: 4,914,697, hereinafter Dabbish), and further in view of Thompson.
6. Claims 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson and Hsu, and further in view of Neoh.
7. In response to applicant's argument that there is no suggestion to combine the references (**Thompson and Hsu**), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir.

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1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Thompson protects access to resources using encryption, and Hsu also protects access to resources, using a key FOB to control access to resources. Controlling/authenticating access to resources by using key FOBs, encryption, and decryption was conventional and well known at the time the invention was made. Therefore, it would have been obvious to one of ordinary skill in the art to use key FOBs to control access to other resources.

8. In response to applicant's argument that there is no suggestion to combine the references (**Neoh, Dabbish, and Thompson**), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Neoh teaches a listening device including a transducer (columns 3-4), Dabbish teaches encrypting/decrypting audio, and transmitting audio, and Thompson protects access to resources using encryption.

9. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

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10. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

11. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

12. The following US Patents: 5,544,161 to Bigham et al. (column 40, lines 1-25), 6,510,515 to Raith (column 10, lines 35-63), 5,970,149 to Johnson (column 4, lines 59-65), 6,314,190 to Zimmermann (column 10, lines 5-51), 5,915,025 to Taguchi et al. (column 15, lines 35-55), teach and support Examiner's position that **deleting a key after a certain amount of time has elapsed in order to protect data** was conventional and well known.

13. Furthermore, **"the rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). See also In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000)**

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(setting forth test for implicit teachings); In re Eli Lilly & Co., 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990) (discussion of reliance on legal precedent); In re Nilssen, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988) (references do not have to explicitly suggest combining teachings); Ex parte Clapp, 227 USPQ 972 (Bd. Pat. App. & Inter. 1985) (examiner must present convincing line of reasoning supporting rejection); and Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993) (reliance on logic and sound scientific reasoning)" (MPEP 2144).

Claim Objections

14. Claim 16 is objected to because of the following informalities: "a method as in claim 15 further comprising deleting the decryption key stored in the memory upon a **predetermined the event**". Appropriate correction is required.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 1, 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson, and further in view of Hsu.

Regarding claim 1, Thompson teaches a hearing device adapted to receive the encrypted audio sound, decrypt the encrypted audio sound, and transmit signals corresponding to the decrypted audio sound to an acoustic transducer of the hearing device (column 5, lines 20-68, column 37, lines 58-68, column 38, lines 1-30); and wherein the hearing device is adapted not to decrypt the encrypted audio sound without receipt of the decryption key, corresponding to the encrypted audio sound (column 9, lines 33-68, column 10, lines 1-30). However, Thompson does not expressly disclose the use of a key fob to transmit a decryption key to the hearing device. Hsu teaches using a key fob for user authentication to a system to access data (column 6, lines 50-67, column 7, lines 1-34). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to transmit a decryption key from the key fob to the hearing device to decrypt the data. One of ordinary skill in the art would have been motivated to do so because the use of key fobs to authenticate users was known in the art (Hsu, columns 1-2).

Regarding claim 5, the combination of Thompson and Hsu teaches the limitations as set forth under claim 1 above. Furthermore, Hsu teaches wherein the key FOB comprises a wireless transmitter for transmitting the decryption key to the hearing device (column 4, lines 57-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a key FOB comprising a wireless transmitter for transmitting the decryption key. One of ordinary skill in the art would have been motivated to do so because the use of a wireless transmitter for transmitting data was well known in the art (Hsu, column 2, lines 15-57).

Regarding claim 6, the combination of Thompson and Hsu teaches the limitations as set forth under claim 5 above. Furthermore, Hsu teaches wherein the key FOB comprises a biometric sensor (column 4, lines 57-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a key FOB comprising a biometric sensor. One of ordinary skill in the art would have been motivated to do so because the use of a biometric sensor was well known in the art (Hsu, columns 1-2).

Regarding claim 7, the combination of Thompson and Hsu teaches the limitations as set forth under claim 6 above. Furthermore, Hsu teaches wherein the biometric sensor comprises a fingerprint sensor (column 4, lines 57-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a biometric sensor comprising a fingerprint sensor. One of ordinary skill in the art would have been motivated to do so because the use of a fingerprint sensor was well known in the art (Hsu, columns 1-2).

Regarding claim 8, the combination of Thompson and Hsu does not disclose expressly wherein the key FOB comprises means for transmitting a plurality of different decryption keys, and means for periodically changing the decryption key transmitted to the hearing device. However, Examiner takes Official Action that having key fobs generate/transmit a plurality of different keys was well known in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the key fob transmit a plurality of different keys since Examiner takes Official Notice that having key fobs generate/transmit a plurality of different keys was well known in the art.

17. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson and Hsu as applied to claim 1 above, and further in view of Neoh.

Regarding claim 2, the combination of Thompson and Hsu does not disclose expressly wherein the hearing device comprises a memory having the decryption key stored therein when the key FOB transmits the decryption key to the hearing device. However, Neoh teaches a hearing device comprising a memory for storing files and a control unit (column 3, lines 45-67, column 4, lines 1-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to store a decryption key in a hearing device to decrypt encrypted data. One of ordinary skill in the art would have been motivated to do so to authenticate a user receiving the digitally encoded audio signals (Neoh, column 4, lines 12-41).

Regarding claim 3, the combination of Thompson, Hsu, and Neoh does not disclose expressly wherein the hearing device comprises means to delete the

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decryption key stored in the memory after a predetermined period of time. However, Examiner takes Official Notice that deleting a key after a certain amount of time has elapsed in order to protect data was well known in the art at the time the invention was made. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to delete the decryption key after a predetermined period of time since Examiner takes Official Notice that deleting a key after a certain amount of time has elapsed in order to protect data was well known in the art.

Regarding claim 4, the combination of Thompson, Hsu, and Neoh teaches the limitations as set forth under claim 2 above. Furthermore, Neoh teaches a hearing device comprising a wireless receiver for receiving a wireless signal (column 3, lines 45-67). Neoh does not disclose expressly receiving a wireless signal comprising the decryption key from the key FOB. Hsu teaches using a key fob for user authentication to a system to access data (column 6, lines 50-67, column 7, lines 1-34). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the decryption key from the key fob in the signal the wireless receiver received. One of ordinary skill in the art would have been motivated to do so to authenticate a user receiving the digitally encoded audio signals (Neoh, column 4, lines 12-41).

18. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neoh and Dabbish, and further in view of Thompson.

Regarding claim 9, Neoh teaches an audio hearing device. Dabbish teaches a microphone; a system for decrypting encrypted audio sounds received at the

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microphone (column 4, lines 25-37). Neoh and Dabbish do not expressly disclose an acoustic transducer adapted to be placed at a user's ear, the acoustic transducer being connected to the decrypting system for transmitting decrypting audio sounds from the acoustic transducer to a user's ear, wherein the decrypting system comprises a memory and a system for receiving and temporarily storing a decryption key in the memory, and wherein the decrypting system requires a predetermined decryption key in the memory in order for the decrypting system to decrypt the encrypted audio sounds. However, Thompson teaches an acoustic transducer adapted to be placed at a user's ear, the acoustic transducer being connected to the decrypting system for transmitting decrypting audio sounds from the acoustic transducer to a user's ear (column 5, lines 20-68, column 37, lines 58-68, column 38, lines 1-30); wherein the decrypting system comprises a memory and a system for receiving and temporarily storing a decryption key in the memory, and wherein the decrypting system requires a predetermined decryption key in the memory in order for the decrypting system to decrypt the encrypted audio sounds (column 9, lines 33-68, column 10, lines 1-30).

Regarding claim 10, the combination of Neoh, Dabbish, and Thompson teaches the limitations as set forth under claim 9 above. Furthermore, Neoh teaches wherein the memory is volatile (column 3, lines 45-67, column 4, lines 1-60, column 5, lines 23-27). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use volatile memory. One of ordinary skill in the art would have been motivated to do so because the use of volatile memory is well known in the art.

Regarding claim 11, the combination of Neoh, Dabbish, and Thompson teaches the limitations as set forth under claim 9 above. Neoh teaches wherein the system for decrypting encrypted audio sounds comprises a wireless receiver (column 3, lines 45-67). Neoh does not disclose expressly receiving a signal having the decryption key. Thompson teaches using a signal having the decryption key (column 9, lines 33-68, column 10, lines 1-30). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the decryption key in the signal the wireless receiver received. One of ordinary skill in the art would have been motivated to do so because it was known in the art to send a decryption key along with a signal (Thompson, column 3, lines 1-47).

19. Claims 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson and Hsu, and further in view of Neoh.

Regarding claim 12, Thompson teaches receiving the encrypted audio sounds at a device having an acoustic transducer at an ear of a user (column 5, lines 20-68, column 37, lines 58-68, column 38, lines 1-30); and decrypting the encrypted audio sounds by the device if the decryption key matches a predetermined decryption key for the encrypted audio sounds (column 9, lines 33-68, column 10, lines 1-30). Hsu teaches receiving a decryption key by the device (column 6, lines 50-67, column 7, lines 1-34). Thompson and Hsu do not expressly disclose decrypting the encrypted audio by the hearing device. However, Neoh teaches a hearing device comprising a memory for storing files and a control unit (column 3, lines 45-67, column 4, lines 1-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention

was made to store a decryption key in a hearing device to decrypt encrypted data. One of ordinary skill in the art would have been motivated to do so to authenticate a user receiving the digitally encoded audio signals (Neoh, column 4, lines 12-41).

Regarding claim 13, the combination of Thompson, Hsu, and Neoh does not disclose expressly wherein the step of receiving a decryption key comprises transmitting the decryption key from a key FOB carried by the user. However, Examiner takes Official Action that having key fobs transmit a key was well known in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the key fob transmit a key since Examiner takes Official Notice that having key fobs transmit a key was well known in the art.

Regarding claim 14, the combination of Thompson, Hsu, and Neoh teaches the limitations as set forth under claim 13 above. Furthermore, Hsu teaches wherein the step of transmitting the decryption key comprises the user actuating a biometric sensor on the key FOB (column 4, lines 57-67). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the user actuate a biometric sensor on the key FOB. One of ordinary skill in the art would have been motivated to do so because the use of a biometric sensor was well known in the art (Hsu, columns 1-2).

Regarding claim 15, the combination of Thompson, Hsu, and Neoh does not disclose expressly storing the decryption key in a memory of the hearing device. However, Neoh teaches a hearing device comprising a memory for storing files and a control unit (column 3, lines 45-67, column 4, lines 1-60). Therefore, it would have been

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obvious to one having ordinary skill in the art at the time the invention was made to store a decryption key in the memory of the hearing device. One of ordinary skill in the art would have been motivated to do so to authenticate a user receiving the digitally encoded audio signals (Neoh, column 4, lines 12-41).

Regarding claim 16, the combination of Thompson, Hsu, and Neoh does not disclose expressly comprising deleting the decryption key stored in the memory upon a predetermined the event. However, Examiner takes Official Notice that deleting a key after a certain amount of time has elapsed in order to protect data was well known in the art at the time the invention was made. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to delete the decryption key after a predetermined period of time since Examiner takes Official Notice that deleting a key after a certain amount of time has elapsed in order to protect data was well known in the art.

Regarding claim 17, the combination of Thompson, Hsu, and Neoh does not disclose expressly deleting the decryption key from the memory periodically. However, Examiner takes Official Notice that performing tasks periodically is/was well known in the art at the time the invention was made. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to delete the decryption key from memory periodically since Examiner takes Official Notice that performing tasks periodically is/was well known in the art at the time the invention was made.

Conclusion

20. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

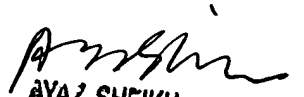
21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David G. Cervetti whose telephone number is (571) 272-5861. The examiner can normally be reached on Monday-Friday 7:00 am - 5:00 pm, off on Wednesday.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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